In for the long haul

Which family physicians plan to continue delivering babies?

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ABSTRACT

OBJECTIVE To compare characteristics of family physicians planning to discontinue or stay in intrapartum care.

DESIGN Self-administered questionnaire.

SETTING Department of Family Practice at Children's and Women's Health Centre of British Columbia.

PARTICIPANTS Ninety-five family physicians who attended at least one birth at the Health Centre between April 1997 and August 1998.

MAIN OUTCOME MEASURES Intention to leave or stay in family practice maternity care, physician characteristics and beliefs.

RESULTS Forty-five percent (43/95) of family physicians planned to leave maternity care within the next 5 years. Physicians planning to leave had more negative attitudes about the alternative birthing centre, doulas, and practising in free-standing settings without on-site obstetricians; were more likely to report missing personal events because they had put their maternity patients first; were less likely to make housecalls during women's labour; and were more likely to be paid through fee-for-service.

CONCLUSION Being paid by fee-for-service, having negative attitudes toward non-traditional maternity care, and conflict between maternity care and personal life were associated with intention to leave intrapartum care.

RÉSUMÉ

OBJECTIF Comparer les caractéristiques des médecins de famille qui envisagent de cesser ou de continuer à prodiguer des soins pernataux.

TYPE D'ÉTUDE Questionnaire auto-administré.

CONTEXTE Le département de médecine familiale du Children's and Women's Health Center de la Colombie-Britannique.

PARTICIPANTS Quatre-vingt-quinze médecins de famille ayant effectué au moins un accouchement au Health Center entre avril 1997 et août 1998.

PRINCIPAUX PARAMÈTRES MESURÉS Intention de ces médecins de cesser ou de poursuivre leur pratique obstétricale au cours des 5 années suivantes, caractéristiques et croyances de ces médecins.

RÉSULTATS Quarante-cinq pour cent des médecins de famille consultés avaient l'intention de quitter la pratique de l'obstétrique au cours des 5 années suivantes. Ceux qui pensaient cesser avaient une moins bonne opinion des centres de naissance non conventionnels, des doulas et de la pratique en milieu autonome n'ayant pas d'obstétricien sur place; ils soulignaient plus souvent que la priorité accordée à leur patientes enceintes les privaient de certaines activités personnelles; ils faisaient moins volontiers des visites à domicile pendant le travail de leurs patientes; et ils étaient plus souvent rémunérés à l'acte.

CONCLUSION L'intention de quitter la pratique obstétricale est associée à des facteurs tels que la rémunération à l'acte, une attitude négative envers les soins obstétricaux non conventionnels et des conflits entre la pratique de l'obstétrique et la vie personnelle.

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The number of family physicians providing maternity care has been gradually declining over the last 20 years.[1-4] Reasons for discontinuing maternity care include perceived threats of malpractice suits, fee structures, physicians' perceptions of their own obstetric skills, disruption of office duties, lack of need in the community, lifestyles, and family factors.[5-13]

Reasons for choosing to stay in maternity care include enjoying attending births; having flexible work and family arrangements, supportive call-group arrangements, and practice partners who participate in maternity care; performing obstetric procedures as residents; many years in family practice; wanting to care for young families and young patients; needing to build a practice; working in a rural area; having neonatal resuscitation training; being able to limit working hours; attending a large number of births; and having had adequate residency training.[8,9,14-16] Other factors include sex, stage of life, marital relationships, help with household duties, and family origin.[10,11] We found no reports, however, of how physicians' beliefs about maternity care affect their plans to engage in or continue with maternity care. Brown and associates did study beliefs about maternity care but did not analyze their findings by intention to leave or stay.[10]

In the Children's and Women's Health Centre of British Columbia, a community and tertiary care teaching centre, family physicians are responsible for approximately 4000 of the 7000 births annually. As in the rest of the country, the number of family physicians attending births in this centre decreased from 160 in 1992 to 85 in 2001. Hence, we thought it important to examine reasons for this substantial change.

METHOD

We developed a questionnaire to gather demographic data about family physicians and to identify their opinions and beliefs about maternity care and childbirth. Earlier versions of the questionnaire were pilot-tested at other hospitals but were not tested for validity or reliability. The final questionnaire contained 25 multiple-choice or fill-in-the-blank questions on demographics and medical practices. There were also 75 statements to be answered on a 7-point Likert scale (1—strongly agree to 7—strongly disagree). We reversed the scale to range from 7—strongly agree to 1—strongly disagree in order to report the scores in a way that makes intuitive sense (ie, smaller numbers indicate more negative sentiments).

In early October 1999, the questionnaire was mailed, along with a self-addressed envelope, to all past and present departmental family physicians (141) who attended one or more births at BC Women's Hospital between April 1997 and August 1998. Included with each questionnaire was a covering letter stating the purpose of the study, guaranteeing confidentiality, and offering respondents the opportunity to win a dinner-for-two gift certificate. Nonrespondents were mailed reminder notices and contacted once by telephone. Returned questionnaires were scanned using the Teleform 5.6 data capture software.[17] Some demographic data were obtained for nonrespondents from departmental application forms.

One survey question was: "If you look 5 years into the future, can you see yourself still doing maternity care?" Physicians were grouped into two cohorts based on their response to this question. Demographic factors and beliefs concerning maternity care were compared for the two groups of physicians. The SPSS 9.0 statistical program was used for the analysis. χ^2 tests were used for categorical data and *t* tests for comparison of means. Where small numbers warranted, the Fisher exact test was used. Ethical approval was received from the University of British Columbia. Given the many questions in the survey and the possibility of significant differences occurring by chance, the level of statistical significance was set at $P < .01$.

RESULTS

Ninety-nine of the 141 (70.2%) physicians responded to the questionnaire, which is in the range of similar surveys (69% to 81%).[6-8] Nonrespondents (n = 40) were more likely to be female (62%) than respondents were (50%), were more likely to have had rotating internships with extra training in family medicine (23.7% vs 10.5%), and were less likely to have "other" postgraduate education (2.6% vs 18%).

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The study population had similar numbers of male and female physicians and those older or younger than 45 (average age 44.6). Our family physicians attended fewer births (34.8) than the average for Canadian family physicians (40), but more than the average for British Columbia (31).[4] Mean age of participants was similar to that of all family physicians in this province.[4] Fifty-five percent of our sample were in fully shared practices; 23.5% did not share maternity on-call duties; and 72.6% were paid exclusively by fee-for-service.

Ninety-five of the 99 respondents answered the question, "If you look 5 years into the future, can you see yourself still doing obstetrics?" Forty-five percent said they planned to leave maternity care in 5 years. After removing physicians older than 60 from the sample, 40% still planned to leave maternity care.

More physicians paid exclusively by fee-for-service were planning on giving up maternity care within the next 5 years (55.1%) than those paid through mixed payment systems were (19.2%) ($P = .001$) (**Table 1**). No other significant differences

Table 1. Demographic characteristics of respondents: *Four respondents did not answer the question about their plans to continue or stop maternity care.*

CHARACTERISTICS OF PHYSICIANS	IN FOR THE LONG HAUL		PLAN TO QUIT MATERNITY CARE		P VALUE
	(%)	NO.	(%)	NO.	
TOTAL	54.7	52	45.3	43	
AGE (Y)					
<45	51	25	49	24	0.29
>45	58.7	27	41.3	19	
<60	57.3	51	42.7	38	0.1
≥60	16.7	1	83.3	5	
SEX					0.18
Male	48.9	23	51.1	24	
Female	60.4	29	39.6	19	
Sex of physicians younger than 45					0.1
• Male	35.3	6	64.7	11	
• Female	59.4	19	40.6	13	
Sex of physicians older than 45					0.48
• Male	56.7	17	43.3	13	
• Female	62.5	10	37.5	6	
MARITAL STATUS					0.7
Married	54.3	44	45.7	37	
POSTGRADUATE TRAINING					0.35
Residency in family practice	61.3	19	38.7	12	
Rotating internship	43.2	16	56.8	21	
Other	64.7	11	35.3	6	
Rotating internship with additional training in family medicine	60	6	40	4	
PRACTICE ORGANIZATION					0.55
Fully shared	60	30	40	20	
Solo practice with shared maternity call	50	10	50	10	
Solo	44.4	8	55.6	10	
Other	66.7	4	33.3	2	
MATERNITY CALL					0.49
Share weekends only	61.7	29	38.3	18	
No sharing	50	11	50	11	
Full sharing	54.5	6	45.5	5	
Other	40	6	60.0	9	
FORM OF PAYMENT FOR SERVICES OTHER THAN MATERNITY CARE					.001
Fee-for-service only	44.9	31	55.1	38	
All other payment schemes	80.8	21	19.2	5	
RECEIVED OBSTETRIC TRAINING FROM FAMILY PHYSICIANS?					0.11
Yes	58.8	40	41.2	28	
TAKEN AN ALSO OR ALARM COURSE?					0.1
Yes	65.8	25	34.2	13	
No	47.4	27	52.6	30	
SERVED WITH LEGAL ACTION BY A PATIENT?					0.54
Yes	56	14	44	11	
IS MALPRACTICE A CONCERN FOR YOU?					0.92
Great concern	50	11	50.0	11	
Concern	55.2	32	44.8	26	
No concern at all	53.8	7	46.2	6	
PROBLEMS FINDING RELIABLE CHILD CARE?					0.43
Yes	60	24	40	16	
No	47.7	21	52.3	23	

ALSO—Advanced Life Support in Obstetrics.
ALARM—Advances in Labour and Risk Management.

in practice characteristics or workload were noted between physicians leaving and staying (**Table 2**).

There were, however, differences in attitudes about aspects of maternity care. Physicians leaving were more negative about the role of doulas ($P = .001$) and the in-hospital alternative birthing centre ($P = .002$), relied more heavily on obstetric consultations ($P = .008$), were less likely to make housecalls to check on labour ($P = .008$), and felt that obstetric practice had a negative effect on their private lives ($P = .008$) (**Table 3**).

These differences in opinion varied by age, sex, and some practice characteristics. For female physicians, negative effects of maternity care on their personal lives were a predictor of intention to leave ($P = .009$), as was a less positive attitude toward the alternative birthing centre ($P = .004$) (**Table 4**). Among male physicians, negative attitudes toward doulas were more common among those planning to leave than those planning to stay ($P = .009$, $P = .001$). Younger physicians planning to leave were more negative about the alternative birthing centre ($P = .006$) and were more likely than younger physicians planning to stay to believe their patients expected electronic fetal monitoring ($P < .001$). Among doctors older than 45, physicians leaving were more negative about doulas than physicians staying ($P < .01$) (**Table 4**). Physicians who were leaving and did not share call duties were more likely to agree they missed important family events (mean 5.9) than those in for the long haul and sharing call duties (mean 3.9) ($P = .007$).

Using multivariate analysis, we found a positive attitude toward the alternative birthing centre was the strongest predictor of intention to stay, followed by a positive attitude toward doulas, after adjusting for age and sex. (In our facility, the alternative birthing centre is located on a different floor from the main maternity ward, where obstetric consultants normally practise.)

Physicians gave various reasons for planning to continue or discontinue maternity care in responses to open-ended questions. Physicians who planned to continue providing maternity care commented that they enjoyed the work (three physicians), had a shared practice (one physician), wanted to cut back due to family commitments (one physician), and believed in the concept of general practice procedures (one physician). Physicians who planned to stop providing maternity care gave the following reasons: heavy physical demands (six physicians), family commitments (three physicians), lack of financial reward (three physicians), administrative policies (three physicians), risk or fear of litigation (two physicians), lack of time (one physician), and not enjoying the work (one physician).

Table 2. Workload measures

WORKLOAD CHARACTERISTICS	IN FOR THE LONG HAUL		PLAN TO QUIT MATERNITY CARE		*P* VALUE
	N	MEAN	N	MEAN	
Patients seen daily	51	27.71	42	30.52	.088
Duration of prenatal patient visits (min)	49	16.10	41	13.9	.035
Half-days per week in office	47	6.77	43	5.67	.102
Births annually	48	37.56	40	31.5	.25

Table 3. Opinions about aspects of maternity care

QUESTION	IN FOR THE LONG HAUL			PLAN TO QUIT MATERNITY CARE			*P* VALUE
	N	MEAN	95% CONFIDENCE INTERVAL FOR MEAN	N	MEAN	95% CONFIDENCE INTERVAL FOR MEAN	
Question 32: Doulas are unnecessary because staff nurses are able to provide adequate labour support	52	3.15	2.71-3.60	39	4.33	3.83-4.84	0
Question 90: I wish many of my maternity patients had the support of a doula during labour and delivery	52	4.63	4.13-5.13	41	3.44	2.97-3.90	0
Question 37: I prefer to attend my patients in the alternative birthing centre	49	5.31	4.86-5.75	41	4.27	3.80-4.74	0
Question 63: I would never practise in a hospital where obstetricians are unavailable	51	3.96	3.38-4.54	42	5.12	4.48-5.76	0
Question 75: I sometimes make housecalls when I am trying to decide whether a woman is in labour	51	4.01	3.41-4.62	41	2.8	2.1-3.46	0
Question 31: I frequently miss important family, social, or personal events because my maternity patients come first	52	4.10	3.61-4.58	42	5.02	4.54-5.50	0

Likert scale ranged from 7—strongly agree to 1—strongly disagree.

Table 4. Opinions about aspects of maternity care by age and sex

QUESTION	N	MEAN	95% CONFIDENCE INTERVAL FOR MEAN	N	MEAN	95% CONFIDENCE INTERVAL FOR MEAN	*P* VALUE
MALE RESPONDENTS							
Question 32: Doulas are unnecessary because staff nurses are able to provide adequate labour support	23	3.52	2.87-4.17	21	4.71	4.08-5.34	0
Question 90: I wish many of my maternity patients had the support of a doula during labour and delivery	23	4.52	3.75-5.29	23	2.96	2.43-3.49	0
FEMALE RESPONDENTS							
Question 31: I frequently miss important family, social, or personal events because my maternity patients come first	29	3.86	3.17-4.56	19	5.21	4.54-5.88	0
Question 37: I prefer to attend my patients in the alternative birthing centre	26	5.58	4.96-6.19	18	4.28	3.69-4.86	0
YOUNGER THAN 45							
Question 37: I prefer to attend my patients in the alternative birthing centre	23	5.26	4.65-5.88	22	4	3.33-4.67	0
Question 71: Patients expect electronic fetal monitoring	24	1.67	1.32-2.01	22	3.32	2.56-4.07	<.001
OLDER THAN 45							
Question 32: Doulas are unnecessary because staff nurses are able to provide adequate labour support	27	3.07	2.42-3.73	17	4.53	3.92-5.14	0
Question 90: I wish many of my maternity patients had the support of a doula during labour and delivery	27	5.11	4.37-5.85	18	3.56	3.01-4.10	0
Question 91: If finances and the pressures of office practice were not issues, I would spend more time in labour with my maternity patients	27	5.67	5.10-6.24	18	4.22	3.28-5.17	0.01

Likert scale ranged from 7—strongly agree to 1—strongly disagree

DISCUSSION

Physicians who planned to leave maternity care were more likely to believe doulas are unnecessary, were less positive about the alternative birthing centre, were more dependent on obstetricians, were less likely to make housecalls to check on women in labour, and were more likely to agree that they miss family and social events because they give priority to their maternity patients. Women physicians who were leaving were more likely to report conflicts between their personal and professional lives than women physicians who were staying. This factor did not appear to be important for male physicians. Our findings agree with others who also found that lifestyle was an important factor in the decision to leave maternity care.[6,8,9,12]

A higher proportion of physicians paid exclusively on a fee-for-service basis, particularly older doctors, were planning to discontinue maternity care. We could find no other reports where the reimbursement system was related to decisions to continue or discontinue maternity care. It is possible that choice of a payment system is linked to a group of attitudes toward aspects of maternity care. We believe that flexible financial arrangements, attitudes toward electronic fetal monitoring, attitudes toward doulas and housecalls, sign-out systems, rapid obstetric backup, and the hospital's alternative birthing centre all point to linked strategies for sustainable practice. For example, preference for the alternative birthing centre, appreciation of doulas, less reliance on electronic fetal monitoring, and more reliance on oneself and covering colleagues suggest awareness of what is required to maintain oneself in maternity care for the long haul.

Physicians who plan to leave could be more dependent on the higher-level technical skills of obstetricians and less reliant on the "low-tech" support of doulas. This was especially true for older physicians

who were leaving. We did not find perceived threats of malpractice suits the barrier found by others.[5,12,18]

Sharing call, which is more frequent in group practice, appears to be important. This result supports the findings of Hueston,[19] who demonstrated higher job satisfaction among doctors in larger group practices.

Other possible reasons for leaving maternity care are lack of job satisfaction or burnout. We did not find a significant difference in workload measures between physicians leaving and staying, nor did we find any correlation between workload measures and scores on "missing important family events." Furthermore, Hueston[19] found that job satisfaction was higher among family physicians who did maternity care. Thus we do not think the reasons for leaving have to do with the number of hours worked but *when* hours are worked. Carroll and associates[11] found that female physicians identified several strategies that enabled them to continue practising maternity care.

Before our study, we thought that being in an urban teaching hospital with opportunities for professional development and teaching might protect the profession from declining participation in maternity care. This was not the case.

Will all those planning to leave do so? Woodward and colleagues[20] found that those who reported a preference for fewer hours of work did in fact reduce their workload in a follow-up survey. A similar follow-up survey could answer this question.

Limitations

Any survey of 100 questions is bound to have some variables that are significantly different. The key question about intention to stay or leave required a yes or no answer and did not offer an opportunity for a "maybe" answer. This restriction could have affected responses to this question. The questionnaire also failed to ask doctors what, if any, changes to practice, lifestyle, payment system, or health care system would alter their intentions to leave maternity care. Also the small sample size limited the analysis of variables.

As the largest maternity facility in Canada and one of the largest collections of family doctors attending births in Canada, we might or might not be representative of family physicians generally. Preliminary unpublished data from the College of Family Physicians of Canada's Janus Project: Family Physicians Meeting the Needs of Tomorrow's Society, however, show similar trends toward more maternity care being offered in group practices and by those with shared on-call duties.[4] In order to determine the generalizability of our results, we are working with partners across Canada to administer the questionnaire in other settings.

Editor's key points

- In the BC Women's and Children's Health Centre where family physicians attended 4000 of the 7000 births annually, this survey revealed that 45% were likely to stop maternity care within the next 5 years.
- Those who intended to leave were more likely to be paid by fee-for-service, and to hold negative attitudes toward practising in alternative birth centres or welcoming doulas. They were also more likely to report missing important family events because of maternity practice.
- Family physicians intending to continue providing maternity care had more positive opinions of alternative birth centres, having doulas attend their births, and making housecalls to determine whether women were in labour. They were also more likely to use alternative payment schemes and shared-call arrangements.

Points de repère du rédacteur

- Cette enquête effectuée au Women's and Children's Health Centre de la Colombie-Britannique où, chaque année, 4000 des 7000 accouchements sont effectués par des médecins de famille a révélé que 45% de ces derniers envisagaient de cesser leur pratique obstétricale au cours des 5 années suivantes.
- Ceux qui envisageaient de partir étaient plus souvent rémunérés à l'acte et étaient plus réticents à exercer dans des centres de naissance non conventionnels ou à collaborer avec les doulas. En outre, ils déploraient plus souvent devoir s'absenter d'événements familiaux importants à cause de la pratique de l'obstétrique.
- Les médecins de famille qui prévoyaient continuer à prodiguer des soins obstétricaux avaient une meilleure opinion des centres de naissance non conventionnels, acceptaient plus volontiers de collaborer avec les doulas et faisaient plus facilement des visites à domicile pour déterminer si leur patiente était en travail. Ils utilisaient aussi plus souvent des modes de paiement alternatifs et des systèmes de garde partagée.

Conclusion

A substantial proportion of this sample of family physicians plans to discontinue maternity care in the next 5 years in this urban teaching hospital. Attitudes toward doulas, obstetric consultation, autonomous practice in a hospital-based alternative birthing centre, exclusive fee-for-service payment, and the effect of maternity care on personal life were all associated with intention to stay in or leave maternity care. Further research is needed on ways to improve the quality of the working lives of family physicians doing maternity care. Systems of shared on-call duties for maternity care clearly are one strategy for retaining more family physicians in maternity care.[21]

Contributors

Dr Klein, *as the study's Principal Investigator, initiated the work and maintained overall responsibility for the study's integrity and the writing.* **Ms Kelly** *conducted some analysis and participated in rewriting and editing the article.* **Ms Spence** *conducted some initial data analysis and wrote early drafts of the article.* **Dr Kaczorowski** *was the principal statistical and epidemiologic resource for the study, advised on multivariate analyses, and edited the Results section.* **Dr Grzybowski** *participated in the research and reviewed the article.*

Competing interests

None declared

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